

## CLAIMS

What is claimed is:

1. A method for compressing and storing a plurality of images, comprising:

creating for each of a plurality of original images a plurality of resultant images by

5 altering the content of each of the plurality of original images a corresponding plurality of different ways;

compressing each of the plurality of resultant images;

selecting from the plurality of resultant images created from each of the plurality of original images one resultant image;

10 placing each of the selected one of the plurality of resultant images into a concatenation file; and

creating a look-up table corresponding to the concatenation file by which each of the selected one of the plurality of resultant images is retrievable from the concatenation file.

15 2. The method as recited in claim 1, comprising using a macro in an imaging application to automate the step of creating the plurality of resultant images.

3. The method as recited in claim 1, comprising using multiple techniques to alter the content of an original image.

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4. The method as recited in claim 1, wherein at least one of the ways of altering the original image comprises rotating the original image.

5. The method as recited in claim 1, wherein at least one of the ways of altering the original image comprises flipping the original image.

6. The method as recited in claim 3, wherein the ways of altering the original image are selected from a group consisting of changing the number of colors in the original image, changing the original image to grayscale, re-sampling the original image, sharpening the original image, changing the contrast of the original image, changing the brightness of the original image, changing the opacity of the original image, and leaving the original image as-is.

7. The method as recited in claim 1, wherein the look-up table comprises data indicative of a file name for each of the plurality of original images, data indicative of a starting byte location of the selected one of the plurality of resultant images in the concatenation file for each of the plurality of original images, and data indicative of the length of each of the selected one of the plurality of resultant images in the concatenation file.

8. The method as recited in claim 7, wherein the look-up table comprises data indicative of the degree to which each of the selected one of the plurality of resultant images was rotated as compared to its corresponding original image.

9. The method as recited in claim 7, wherein the look-up table comprises data indicative of whether each of the selected one of the plurality of resultant images was flipped as compared to its corresponding original image.

10. The method as recited in claim 1, comprising adjusting the size of at least some of the original images prior to the step of creating the plurality of resultant images.

11. The method as recited in claim 1, wherein each of the plurality of resultant images is  
5 compressed into a GIF file.

12. The method as recited in claim 1, wherein the selected one of the resultant images has the smallest file size.

10 13. A computer readable media having instructions for automatically compressing a plurality of images, the instructions performing steps comprising:

creating for each of a plurality of original images a plurality of resultant images by altering the content of each of the plurality of original images a corresponding plurality of different ways;

15 compressing each of the plurality of resultant images;

selecting from the plurality of resultant images created from each of the plurality of original images one resultant image; and

storing the each of the selected one of the plurality of resultant images such that each of the selected one of the plurality of resultant images is retrievable to be displayed as a  
20 representation of its corresponding original image.

14. The readable media as recited in claim 13, wherein the instructions place each of the selected one of the plurality of resultant images into a concatenation file and create a look-up

table corresponding to the concatenation file by which each of the selected one of the plurality of resultant images is retrievable.

15. The readable media as recited in claim 13, wherein the instructions use a macro in an  
5 imaging application to perform the step of creating the plurality of resultant images.

16. The readable media as recited in claim 13, wherein the instructions use multiple techniques to alter the content of an original image.

10 17. The readable media as recited in claim 13, wherein at least one of the ways of altering the original image comprises rotating the original image.

18. The readable media as recited in claim 13, wherein at least one of the ways of altering the original image comprises flipping the original image.

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19. The readable media as recited in claim 13, wherein the ways of altering the original image are selected from a group consisting of changing the number of colors in the original image, changing the original image to grayscale, resampling the original image, sharpening the original image, changing the contrast of the original image, changing the brightness of the original image,  
20 changing the opacity of the original image, and leaving the original image as-is.

20. The readable media as recited in claim 14, wherein the look-up table comprises data indicative of a file name for each of the plurality of original images, data indicative of a starting

byte location of the selected one of the plurality of resultant images in the concatenation file for each of the plurality of original images, and data indicative of the length of each of the selected one of the plurality of resultant images in the concatenation file.

5     21. The readable media as recited in claim 20, wherein the look-up table comprises data indicative of the degree to which each of the selected one of the plurality of resultant images was rotated as compared to its corresponding original image.

10     22. The readable media as recited in claim 20, wherein the look-up table comprises data indicative of whether each of the selected one of the plurality of resultant images was flipped as compared to its corresponding original image.

15     23. The readable media as recited in claim 13, wherein the instructions adjust the size of at least some of the original images prior to the step of creating the plurality of resultant images.

24. The readable media as recited in claim 13, wherein each of the plurality of resultant images is compressed into a GIF file.

25. A hand-held device, comprising:

20         a display;

       a memory having stored therein a concatenation file having data corresponding to a plurality of compressed images each representative of an original image and a look-up table having data indicative of a starting byte location of each of the compressed images within the

concatenation file and data indicative of the length of each of the compressed images within the concatenation file;

a program cooperable with the look-up table for accessing the data corresponding to each of the plurality of compressed images and for decompressing and using any accessed data to  
5 display an image representative of an original image.

26. The hand-held device as recited in claim 25, wherein the look-up table further comprises data indicative of the degree to which each of the compressed images was rotated as compared to its corresponding original image and the program is adapted to rotate the displayed image so that  
10 the orientation of the displayed image corresponds to the orientation of its corresponding original image.

27. The hand-held device as recited in claim 25, wherein the look-up table further comprises data indicative of whether each of the compressed images was flipped as compared to its  
15 corresponding original image and the program is adapted to flip the image so that elements of the displayed image are arranged the same as they appear in its corresponding original image.

28. A system for compressing and storing a plurality of images, comprising:  
a computer having a means for creating for each of a plurality of original images a  
20 plurality of resultant images by altering the content of each of the plurality of original images a corresponding plurality of different ways; a means for compressing each of the plurality of resultant images; a means for selecting from the plurality of resultant images created from each of the plurality of original images one resultant image; a means for placing each of the selected

one of the plurality of resultant images into a concatenation file; and a means for creating a look-up table corresponding to the concatenation file by which each of the selected one of the plurality of resultant images is retrievable from the concatenation file.

5 29. The system as recited in claim 28, wherein the computer uses a macro in an imaging application for creating the plurality of resultant images.

30. The system as recited in claim 28, wherein the computer uses multiple techniques to alter the content of an original image.

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31. The system as recited in claim 30, wherein at least one of the ways of altering the original image comprises rotating the original image.

32. The system as recited in claim 30, wherein at least one of the ways of altering the original  
15 image comprises flipping the original image.

33. The system as recited in claim 30, wherein the ways of altering the original image are selected from a group consisting of changing the number of colors in the original image, changing the original image to grayscale, resampling the original image, sharpening the original  
20 image, changing the contrast of the original image, changing the brightness of the original image, changing the opacity of the original image, and leaving the original image as-is.

34. The system as recited in claim 28, wherein the look-up table comprises data indicative of a

file name for each of the plurality of original images, data indicative of a starting byte location of the selected one of the plurality of resultant images in the concatenation file for each of the plurality of original images, and data indicative of the length of each of the selected one of the plurality of resultant images in the concatenation file.

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35. The system as recited in claim 34, wherein the look-up table comprises data indicative of the degree to which each of the selected one of the plurality of resultant images was rotated as compared to its corresponding original image.

10 36. The system as recited in claim 34, wherein the look-up table comprises data indicative of whether each of the selected one of the plurality of resultant images was flipped as compared to its corresponding original image.

15 37. The system as recited in claim 28, wherein the computer adjusts the size of at least some of the original images prior to the step of creating the plurality of resultant images.

38. The system as recited in claim 28, wherein each of the plurality of resultant images is compressed into a GIF file.

20 39. A method for compressing and storing a plurality of images, comprising:  
creating for each of a plurality of original images a plurality of resultant images by  
altering the content of each of the plurality of original images a corresponding plurality of  
different ways;



compressing each of the plurality of resultant images;

selecting from the plurality of resultant images created from each of the plurality of original images one resultant image; and

storing each of the selected one of the plurality of resultant images in a memory device.